

Work Order ID 77446

77446

Page 1

December-07-11 11:05:31 AM

Item ID: D2571 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, Fwd Out 205
 Start Date: 07/12/2011 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 28/12/2011 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: M.L.J Date: 11/12/07 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2571	Rev E

100	HAAS CNC VERTICAL MACHINING #1	0.00							
100									
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	Program Batch No. <u>B77446</u> Double check by: <u>BA</u> 1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets 3-Machine Step No 3 per Folio FA051 and inspect								

110	CONVENTIONAL MILLING MACHINE	0.00							
110									
Mill Conv	Memo	0.00							
Conventional Milling Machine	Machine keyway as per dwg D2571 & D2572								

120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.00							
Quality Control									

(PFO)

W/O:		77446 WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2571 PAR #: _____ Fault Category: machining NCR: Yes No QA Date: 12/1/11
 Resolution: scrap Disposition: scrap QA: N/C Closed: ✓ Date: 12/1/11

NCR:		214.11 WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11/12/11	100	the 2 bore are too deep of .020" crushin all wall thickness too thin. RC operator error L.O.A. inverse the origine G55 and G59	<u>MB</u> 11/12/21 QSI042	scrap and destroy replace Qty1 Batch 76831	<u>mb</u> 11/12/21	<u>S</u> 11/12/21	<u>MB</u> 11/12/21 QSI042	<u>S</u> 11/12/21

NOTE: Date & initial all entries

Work Order ID 77446

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Page 2

Item ID: D2571 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, Fwd Out 205
 Start Date: 07/12/2011 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 28/12/2011 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		<i>11/12/23</i>		<u>12</u>			
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00		<i>/A2 11-12-28</i>		<u>12</u>			
150 *150* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo START TIME: <i>8-50</i> FINISH TIME: <i>9-20</i>	0.00 0.00							<i>12 x 4 m / 12/01/02</i>

M49480

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 77446

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77446

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Item ID: D2571

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Saddle, Fwd Out 205

Start Date: 07/12/2011 Start Qty: 12.00

12

Cust Item ID:

Required Date: 28/12/2011 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: <u>St 433</u>	0.00							
170									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

Handwritten signature and date: 12/01/02

Handwritten signature and date: 12/01/04

Handwritten signature and date: MF 12-01-02

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-07-11 11:05:35 AM

Page 1

Work Order ID: 77446

77446

Parent Item: D2571

D2571

Parent Item Name: Saddle, Fwd Out 205

Start Date: 07/12/2011

Required Date: 28/12/2011

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: I02.10.02Re-format; Change to Dwg Rev. D & incorporated
D2572KJ

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D6101-007

Manufactured

No

100

Each

21.0000

1

12

D6101-007

Re 11.12.22

Saddle Billet

Location

Loc Qty

Loc Code

MAT042

10

71722

8

72228 ✓

2

2

MAT045

11

65383 ✓

1

65954 ✓

4

70680 ✓

6

3

76839

3

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 77446
Description: Saddle, Fwd Outboard	Part Number: D2571
Inspection Dwg: D2571 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		0.440	0.440	0.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.002	8.002		
F	0.490	0.510		0.500	0.500	0.500	.501		
G	0.257	0.262		0.259	0.259	0.259	.259		
H	0.375	0.380		0.377	0.377	0.377	.377		
I	0.490	0.510		0.501	0.501	0.501	.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.568	0.568	0.568	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		0.125	0.125	0.125	.125		
Q	0.115	0.135		0.135	0.135	0.135	.135		
R	0.240	0.260		0.252	0.252	0.252	.252		
S	0.115	0.135		0.128	0.128	0.128	.128		
T	0.178	0.198		0.188	0.188	0.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		0.236	0.238	0.240	.240		
W	0.115	0.135		0.121	0.121	0.121	.122		
X	0.308	0.313		.312	.312	.312	.312		
Y	0.760	0.765		.764	.764	.764	.764		
Z	0.352	0.372		0.360	0.360	0.365	.362		
AA	0.470	0.530		0.500	0.500	0.500	.500		
AB	0.615	0.635		0.628	0.628	0.628	.627		
AC	0.053	0.073		0.063	0.063	0.063	.063		
AD	0.240	0.260		0.260	0.260	0.260	.247		
AE	1.375	1.395		1.3909	1.390	1.3907	1.3885		
AF	0.115	0.135		0.135	0.135	0.135	.135		
AG	0.240	0.280		0.275	0.275	0.275	.270		
AH	0.240	0.260		0.248	0.248	0.250	.247		
AI	2.000	2.020		2.0022	2.0032	2.0039	2.0007		
AJ	0.023	0.043							
Accept/Reject									

Measured by: B.A.	Audited by: [Signature]
Date: 11/12/17	Date: 11/12/23

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	[Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	77446
Description: Saddle, Fwd Outboard	Part Number:	D2571
Inspection Dwg: D2571 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	15	16	17	18		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.000	8.001	8.001		
F	0.490	0.510		.501	.500	.500	.500		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.499	.500	.500	.499		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.567	.567	.568	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.126	.126	.125	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.252	.252	.253	.252		
S	0.115	0.135		.130	.131	.130	.130		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.240	.240	.240	.240		
W	0.115	0.135		.122	.121	.122	.123		
X	0.308	0.313		.313	.313	.313	.313		
Y	0.760	0.765		.764	.764	.764	.764		
Z	0.352	0.372		.364	.365	.364	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.626	.625	.626	.625		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.249	.247	.248	.248		
AE	1.375	1.395		1.388	1.387	1.388	1.388		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.255	.255	.260		
AH	0.240	0.260		.250	.249	.250	.251		
AI	2.000	2.020		2.0028	2.003	2.003	2.0036		
AJ	0.023	0.043							
Accept/Reject									

Measured by:	ML
Date:	11/12/20

Audited by:	SD
Date:	11/12/23

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD	Work Order: 77446
Description: Saddle, Fwd Outboard	Part Number: D2571
Inspection Dwg: D2571 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	#9	#10	#11	#12		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.001	8.001	8.000		
F	0.490	0.510		.500	.499	.502	.500		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.500	.500	.499	.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.568	.567	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.126	.125	.126	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.253	.253	.252	.253		
S	0.115	0.135		.130	.132	.131	.129		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.240	.240	.240	.240		
W	0.115	0.135		.121	.121	.123	.122		
X	0.308	0.313		.313	.313	.313	.313		
Y	0.760	0.765		.764	.764	.764	.764		
Z	0.352	0.372		.360	.362	.362	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.625	.623	.624	.625		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.247	.248	.249	.247		
AE	1.375	1.395		1.388	1.388	1.386	1.387		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.255	.260	.260	.260		
AH	0.240	0.260		.249	.249	.251	.250		
AI	2.000	2.020		2.0036	2.0036	2.002	2.003		
AJ	0.023	0.043							
Accept/Reject									







Measured by:	cmf
Date:	11/12/21

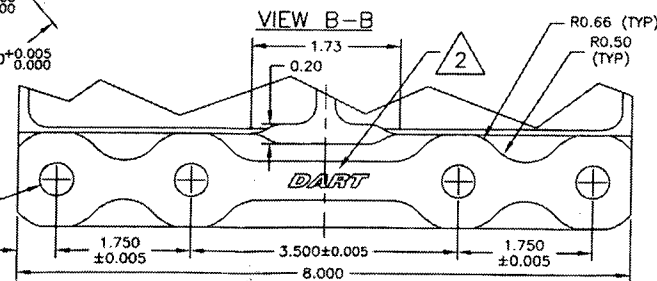
Audited by:	RD
Date:	11/12/23

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

05-12-86

MATERIAL: 7075-T7351 (QQ-A-250/12) (REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART
QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- | | |
|---|---|
|  | ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010 |
|  | ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125 |
|  | CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES) |
|  | CHAMFER 0.063" x 45° ALL AROUND |
|  | CHAMFER 0.033" x 45° (SEE DETAIL C)  |






VIEW B-B

SECTION A-A

DETAIL C
SCALE 4:3

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THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

E	05.07.13	ADD CHAMFER ON RIDGE, NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCOMP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN		 DART AEROSPACE LTD. MARKHAM, ONTARIO, CANADA
DRAWN BY DS PH		
CHECKED	APPROVED	DRAWING NO.
		D2571
DATE		TITLE
05.07.13		OUTER FWD SADDLE

UNCONTROLLED
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

77 446 M.C.J
11/12/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries